



SEQUENCE LISTING

<110> MAMBIEN & TECUARDO

<120> SOMATIC TRANSFER OF MODIFIED GENES TO PREDICT DRUG EFFECTS

<130> 47728(1699)

<140> 09/187,669

<141> 1998-11-05

<150> 60/064,893

<151> 1997-11-07

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 630

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: Mammalian ion channel protein

<400> 1

Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala
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Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg
20 25 30

Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser
35 40 45

Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp
50 55 60

Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr
65 70 75 80

Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu
85 90 95

Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile
100 105 110

Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile
115 120 125

Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn
130 135 140

Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser
145 150 155 160

Ala	Leu	Pro	Thr	Met	Thr	Ala	Arg	Gln	Arg	Val	Trp	Arg	Ala	Phe	Glu	165	170	175	
Asn	Pro	His	Thr	Ser	Thr	Met	Ala	Leu	Val	Phe	Tyr	Tyr	Val	Thr	Gly	180	185	190	
Phe	Phe	Ile	Ala	Val	Ser	Val	Ile	Ala	Asn	Val	Val	Glu	Thr	Val	Pro	195	200	205	
Cys	Gly	Ser	Ser	Pro	Gly	His	Ile	Lys	Glu	Leu	Pro	Cys	Gly	Glu	Arg	210	215	220	
Tyr	Ala	Val	Ala	Phe	Phe	Cys	Leu	Asp	Thr	Ala	Cys	Val	Met	Ile	Phe	225	230	235	240
Thr	Val	Glu	Tyr	Leu	Leu	Arg	Leu	Ala	Ala	Ala	Pro	Ser	Arg	Tyr	Arg	245	250	255	
Phe	Val	Arg	Ser	Val	Met	Ser	Ile	Ile	Asp	Val	Val	Ala	Ile	Leu	Pro	260	265	270	
Tyr	Tyr	Ile	Gly	Leu	Val	Met	Thr	Asp	Asn	Glu	Asp	Val	Ser	Gly	Ala	275	280	285	
Phe	Val	Thr	Leu	Arg	Val	Phe	Arg	Val	Phe	Arg	Ile	Phe	Lys	Phe	Ser	290	295	300	
Arg	His	Ser	Gly	Gly	Leu	Arg	Ile	Leu	Gly	Tyr	Thr	Leu	Lys	Ser	Cys	305	310	315	320
Ala	Ser	Glu	Leu	Gly	Phe	Leu	Leu	Phe	Ser	Leu	Thr	Met	Ala	Ile	Ile	325	330	335	
Ile	Phe	Ala	Thr	Val	Met	Phe	Tyr	Ala	Glu	Lys	Gly	Ser	Ser	Ala	Ser	340	345	350	
Lys	Phe	Thr	Ser	Ile	Pro	Ala	Ala	Phe	Trp	Tyr	Thr	Ile	Val	Thr	Met	355	360	365	
Thr	Thr	Leu	Gly	Tyr	Gly	Asp	Met	Val	Pro	Lys	Thr	Ile	Ala	Gly	Lys	370	375	380	
Ile	Phe	Gly	Ser	Ile	Cys	Ser	Leu	Ser	Gly	Val	Leu	Val	Ile	Ala	Leu	385	390	395	400
Pro	Val	Pro	Val	Ile	Val	Ser	Asn	Phe	Ser	Arg	Ile	Tyr	His	Gln	Asn	405	410	415	
Gln	Arg	Ala	Asp	Lys	Arg	Arg	Ala	Gln	Lys	Lys	Ala	Arg	Leu	Ala	Arg	420	425	430	
Ile	Arg	Ala	Ala	Lys	Ser	Gly	Ser	Ala	Asn	Ala	Tyr	Met	Gln	Ser	Lys	435	440	445	
Arg	Asn	Gly	Leu	Leu	Ser	Asn	Gln	Leu	Gln	Ser	Ser	Glu	Asp	Glu	Pro	450	455	460	

Ala Phe Val Ser Lys Ser Gly Ser Ser Phe Glu Thr Gln His His His
 465 470 475 480
 Leu Leu His Cys Leu Glu Lys Thr Thr Asn His Glu Phe Val Asp Glu
 485 490 495
 Gln Val Phe Glu Glu Ser Cys Met Glu Val Ala Thr Val Asn Arg Pro
 500 505 510
 Ser Ser His Ser Pro Ser Leu Ser Ser Gln Gln Gly Val Thr Ser Thr
 515 520 525
 Cys Cys Ser Arg Arg His Lys Lys Thr Phe Arg Ile Pro Asn Ala Asn
 530 535 540
 Val Ser Gly Ser His Arg Gly Ser Val Gln Glu Leu Ser Thr Ile Gln
 545 550 555 560
 Ile Arg Cys Val Glu Arg Thr Pro Leu Ser Asn Ser Arg Ser Ser Leu
 565 570 575
 Asn Ala Lys Met Glu Glu Cys Val Lys Leu Asn Cys Glu Gln Pro Tyr
 580 585 590
 Val Thr Thr Ala Ile Ile Ser Ile Pro Thr Pro Pro Val Thr Thr Pro
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 Glu Gly Asp Asp Arg Pro Glu Ser Pro Glu Tyr Ser Gly Gly Asn Ile
 610 615 620
 Val Arg Val Ser Ala Leu
 625 630

<210> 2
 <211> 214
 <212> PRT
 <213> Unknown Organism

<220>
 <223> Description of Unknown Organism: Mammalian ion
 channel protein

<400> 2
 Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala
 1 5 10 15
 Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg
 20 25 30
 Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser
 35 40 45
 Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp
 50 55 60
 Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr
 65 70 75 80

